

AMENDMENTS TO THE CLAIMS

Please, cancel claims 12-16, 22, 26, and 27 as indicated below. All claims pending in this application are reproduced below.

1 1.(previously presented) A communication apparatus for processing digital
2 information included in transmissions received from cordless devices, the apparatus
3 comprising:
4 an input capture mechanism coupled to an input and configured to collect input
5 capture data associated with the digital information included in at least a
6 first transmission, the first transmission received from a first cordless
7 device configured to transmit asynchronously;
8 a microcontroller unit having an input that receives a digital communication
9 packet derived from the transmission, the microcontroller unit for
10 processing the digital communication packet and further comprising:
11 an edge detection mechanism coupled to the input for detecting state transitions
12 included in the digital communication packet;
13 a timer having a first value that is read in response to the edge detection
14 mechanism detecting a first state transition, and a second value that is read
15 in response to the edge detection mechanism detecting a second state
16 transition; and
17 a central processing unit having access to the input capture mechanism, the
18 central processing unit configured to decode the digital information to

19 derive the associated input capture data, and configured to format the input
20 capture data associated with the digital information; and
21 a data report engine operatively coupled to the central processing unit, the data
22 report engine configured to communicate the formatted input capture data
23 to a host system having no active driver corresponding to the first cordless
24 device.

1 2. (previously presented) The apparatus of claim 32, wherein the valid pulse width
2 indicates that a valid start pattern of the digital communication packet has been received.

1 3. (previously presented) The apparatus of claim 32, wherein the valid pulse width
2 indicates that a valid stop pattern of the digital communication packet has been received.

1 4. (previously presented) The apparatus of claim 32, wherein the valid pulse width
2 indicates that a valid bit pattern of the digital communication packet has been received.

1 5. (previously presented) The apparatus of claim 1, wherein the data report engine
2 further comprises:

3 a first data structure for declaring functionality of standard keys included on a
4 cordless keyboard, and a second data structure for declaring functionality
5 of a cordless mouse.

1 6. (Original) The apparatus of claim 5 wherein the second data structure is also
2 for declaring functionality of system control keys and consumer control keys included on
3 a cordless keyboard.

1 7. (previously presented) The apparatus of claim 1, wherein the data report engine
2 is further configured to, in response to receiving decoded and formatted data from the
3 central processing unit, generating a standard data report that can be communicated to,
4 and understood by, the host system having no active driver corresponding to the first
5 cordless device.

1 8. (previously presented) The apparatus of claim 31, wherein the data report
2 engine is further configured to, responsive to a status data reporting being enabled,
3 generating a standard data report that indicates to the host system that a status data report
4 is available from one of the first or the second cordless device.

1 9. (Original) The apparatus of claim 8, wherein the status data report indicates at
2 least one of an identity of the cordless device, a battery status of the cordless device, a
3 profile of the cordless device, a profile code of the cordless device.

1 10. (previously presented) The apparatus of claim 1 further comprising:
2 a second input capture mechanism coupled to a second input and configured to
3 collect input capture data associated with the digital information included
4 in a second transmission, the second transmission received from a second
5 cordless device, wherein the central processing unit can simultaneously
6 decode and format capture data associated with digital information from a
7 number of different communication links, each communication link
8 associated with a different cordless device, and a different input capture
9 mechanism.

1 11. –16. (Cancelled)

1 17. (previously presented) The method of claim 33 further comprising:
2 declaring functionality of standard keys included on a cordless keyboard so that a
3 data report responsive to standard key activity will be understood by the
4 host system receiving the data report.

1 18. (previously presented) The method of claim 33 further comprising:
2 declaring functionality of a mouse so that a data report responsive to mouse
3 activity will be understood by the host system receiving the data report.

1 19. (previously presented) The method of claim 33 further comprising:
2 in response to receiving decoded and formatted data, generating a standard data
3 report that can be transmitted to, and understood by, the host system.

1 20. (previously presented) The method of claim 33 further comprising:
2 responsive to status data reporting being enabled, generating a standard data
3 report that indicates to the host system that a status data report is available
4 from at least one of the first or the second cordless device.

1 21. (Original) The method of claim 20, wherein the status data report indicates at
2 least one of an identity of the cordless device, a battery status of the cordless device, a
3 profile of the cordless device, a profile code of the cordless device, a status of the
4 cordless device, and a status of the apparatus.

1 22. (Cancelled)

1 23. (previously presented) A method for processing digital information included
2 in a transmissions from cordless devices, the method comprising:
3 collecting input capture data associated with the digital information included in at
4 least a first transmission, the first transmission received from a first
5 cordless device configured to transmit asynchronously;
6 decoding the digital information to derive the associated input capture data;
7 formatting the input capture data associated with the digital information; and
8 communicating the formatted input capture data to a host system having no active
9 driver corresponding to the first cordless device.

1 24. (previously presented) A method for communicating status information from a
2 cordless device to a corresponding driver running on a host system, the method
3 comprising:
4 receiving a standard data report that indicates that status reporting is enabled and
5 status data is available to be collected for the cordless device; and
6 retrieving asynchronously the status data, the status data including at least one of
7 an identity of the cordless device, a battery status of the cordless device, a
8 profile of the cordless device, and a profile code of the cordless device.

1 25. (previously presented) A method for processing digital information included
2 in an asynchronous transmission from a composite cordless device, the method
3 comprising:
4 collecting input capture data included in the digital information;

5 determining whether data included in the digital information is a first data type or
6 a second data type based on the input capture data;

7 communicating the first type of data to its correct destination included in a host
8 system having no active driver corresponding to the composite cordless
9 device; and

10 communicating the second type of data to its correct destination included in a host
11 system having no active driver corresponding to the composite cordless
12 device.

1 26 – 27. (Cancelled)

1 28. (previously presented) A computer program product, stored on a computer
2 readable medium, for processing digital information included in a transmission from a
3 cordless device, wherein in response to the computer program product being executed by
4 a processor, the processor performs the steps of:

5 collecting input capture data associated with the digital information included in at
6 least a first transmission, the first transmission received from a first
7 cordless device configured to transmit asynchronously;

8 decoding the digital information to derive the associated input capture data;

9 formatting the input capture data associated with the digital information; and

10 communicating the formatted input capture data to a host system having no active
11 driver corresponding to the first cordless device.

1 29. (Original) A computer program product, stored on a computer readable
2 medium, for communicating status information from a cordless device to a corresponding

3 driver running on a host system, wherein in response to the computer program product
4 being executed by a processor, the processor performs the steps of:
5 receiving a standard data report that indicates that status reporting is enabled and
6 status data is available to be collected for the cordless device; and
7 retrieving the status data, the status data including at least one of an identity of the
8 cordless device, a battery status of the cordless device, a profile of the
9 cordless device, and a profile code of the cordless device.

1 30. (Original) A computer program product, stored on a computer readable
2 medium, for processing digital information included in a transmission from a composite
3 cordless device, wherein in response to the computer program product being executed by
4 a processor, the processor performs the steps of:
5 collecting input capture data included in the digital information;
6 determining whether data included in the digital information is a first data type or
7 a second data type based on the input capture data;
8 communicating the first type of data to its correct destination included in a host
9 system having no active driver corresponding to the composite cordless
10 device; and
11 communicating the second type of data to its correct destination included in a host
12 system having no active driver corresponding to the composite cordless
13 device.

1 31. (previously presented) The apparatus of claim 1, wherein the input capture
2 mechanism is further configured to collect input capture data associated with the digital
3 information included in a second transmission, the second transmission received from a

4 second cordless device configured to transmit synchronously in response to a polling
5 signal from the host.

1 32. (previously presented) The apparatus of claim 1, wherein the digital
2 information includes digital communication packets and wherein the input capture
3 mechanism further comprises:
4 an edge detection mechanism coupled to the input for detecting state transitions
5 included in the digital communication packets; and
6 a timer having a first value that is read in response to the edge detection
7 mechanism detecting a first state transition, and a second value that is read
8 in response to the edge detection mechanism detecting a second state
9 transition;
10 wherein the central processing unit is configured to have access to the first and second
11 values of the timer for determining whether a valid pulse-width has been received.

1 33. (previously presented) The method of claim 23, further comprising:
2 collecting input capture data associated with the digital information included in a
3 second transmission, the second transmission received from a second
4 cordless device configured to transmit synchronously in response to a
5 polling signal from the host; and
6 communicating the formatted input capture data to the host system, the host
7 system further having no active driver corresponding to the second
8 cordless device.